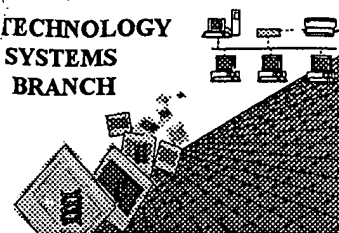


C-m
Kam

TECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/673,785C
Source: 1622 Rush
Date Processed by STIC: 5/6/2003

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 09/673,785C

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics
Wrapped Aminos The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino
Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) _____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0
"bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences
(OLD RULES) Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences
(NEW RULES) Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000
- 9 Use of n's or Xaa's
(NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa; and which residue n or Xaa represents.
- 10 Invalid <213>
Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses.
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0
"bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.

C-M.
Kam

1600

RAW SEQUENCE LISTING

DATE: 05/06/2003

PATENT APPLICATION: US/09/673,785C

TIME: 10:23:36

Input Set : A:\8830-170.ST25.txt

Output Set: N:\CRF4\05062003\I673785C.raw

3 <110> APPLICANT: The Queen's University of Belfast
 4 Nelson, John
 5 Walker, Brian
 6 McFerran, Neil
 7 Patrick, Harriot
 9 <120> TITLE OF INVENTION: Peptide Fragments of Murine Epidermal Growth Factor as
 Laminin
 10 Receptor Targets
 12 <130> FILE REFERENCE: 8830-170 (43784-181696)
 14 <140> CURRENT APPLICATION NUMBER: US 09/673,785C
 C--> 15 <141> CURRENT FILING DATE: 2000-12-19
 17 <150> PRIOR APPLICATION NUMBER: PCT/GB99/01211
 18 <151> PRIOR FILING DATE: 1999-04-21
 20 <150> PRIOR APPLICATION NUMBER: 9808407.2
 21 <151> PRIOR FILING DATE: 1998-04-22
 23 <160> NUMBER OF SEQ ID NOS: 31
 25 <170> SOFTWARE: PatentIn version 3.2
 27 <210> SEQ ID NO: 1
 28 <211> LENGTH: 9
 29 <212> TYPE: PRT
 30 <213> ORGANISM: Artificial sequence
 32 <220> FEATURE:
 33 <223> OTHER INFORMATION: Artificial Sequence based on linear sequence of amino acids
 34 925-933 of mature muring laminin B1 chain
 37 <220> FEATURE:
 38 <221> NAME/KEY: MOD_RES
 39 <222> LOCATION: (9)..(9)
 40 <223> OTHER INFORMATION: AMIDATION
 42 <400> SEQUENCE: 1
 44 Cys Asp Pro Gly Tyr Ile Gly Ser Arg
 45 1 5
 48 <210> SEQ ID NO: 2
 49 <211> LENGTH: 10
 50 <212> TYPE: PRT
 51 <213> ORGANISM: Artificial Sequence
 53 <220> FEATURE:
 54 <223> OTHER INFORMATION: Artificial Sequence based on amino acid residues 33 to 42 of
 55 murine epidermal growth factor (mEGF)
 57 <400> SEQUENCE: 2
 59 Cys Val Ile Gly Tyr Ser Gly Asp Arg Cys
 60 1 5 10
 63 <210> SEQ ID NO: 3
 64 <211> LENGTH: 10
 65 <212> TYPE: PRT

Does Not Comply
Corrected Diskette Needed

pp 2-6

RAW SEQUENCE LISTING

DATE: 05/06/2003

PATENT APPLICATION: US/09/673,785C

TIME: 10:23:36

Input Set : A:\8830-170.ST25.txt

Output Set: N:\CRF4\05062003\I673785C.raw

66 <213> ORGANISM: Artificial Sequence
 68 <220> FEATURE:
 69 <223> OTHER INFORMATION: Artificial Sequence
 72 <220> FEATURE:
 73 <221> NAME/KEY: MISC_FEATURE
 74 <222> LOCATION: (5)..(5)
 75 <223> OTHER INFORMATION: tyrosine analogue at position 5
 77 <400> SEQUENCE: 3
 W--> 79 Cys Val Ile Gly Xaa Ser Gly Asp Arg Cys
 80 1 5 10
 83 <210> SEQ ID NO: 4
 84 <211> LENGTH: 10
 85 <212> TYPE: PRT
 86 <213> ORGANISM: Artificial sequence
 88 <220> FEATURE:
 89 <223> OTHER INFORMATION: Artificial Sequence
 92 <220> FEATURE:
 93 <221> NAME/KEY: MISC_FEATURE
 94 <222> LOCATION: (9)..(9)
 95 <223> OTHER INFORMATION: arginine analogue at position 9
 97 <400> SEQUENCE: 4
 W--> 99 Cys Val Ile Gly Tyr Ser Gly Asp Xaa Cys
 100 1 5 10
 103 <210> SEQ ID NO: 5
 104 <211> LENGTH: 10
 105 <212> TYPE: PRT
 106 <213> ORGANISM: Artificial Sequence
 108 <220> FEATURE:
 109 <223> OTHER INFORMATION: Artificial Sequence
 112 <220> FEATURE:
 113 <221> NAME/KEY: MOD_RES
 114 <222> LOCATION: (1)..(1)
 115 <223> OTHER INFORMATION: ACETYLATION
 117 <400> SEQUENCE: 5
 119 Cys Val Ile Gly Tyr Ser Gly Asp Arg Cys
 120 1 5 10
 123 <210> SEQ ID NO: 6
 124 <211> LENGTH: 10
 125 <212> TYPE: PRT
 126 <213> ORGANISM: Artificial Sequence
 128 <220> FEATURE:
 129 <223> OTHER INFORMATION: Artificial Sequence
 132 <220> FEATURE:
 133 <221> NAME/KEY: MOD_RES
 134 <222> LOCATION: (10)..(10)
 135 <223> OTHER INFORMATION: AMIDATION
 137 <400> SEQUENCE: 6
 139 Cys Val Ile Gly Tyr Ser Gly Asp Arg Cys
 140 1 5 10

*insufficient response-give
 source of
 genetic
 material
 (see item 11 on
 Error Summary
 sheet)*

RAW SEQUENCE LISTING

DATE: 05/06/2003

PATENT APPLICATION: US/09/673,785C

TIME: 10:23:36

Input Set : A:\8830-170.ST25.txt

Output Set: N:\CRF4\05062003\I673785C.raw

143 <210> SEQ ID NO: 7
 144 <211> LENGTH: 10
 145 <212> TYPE: PRT
 146 <213> ORGANISM: Artificial Sequence
 148 <220> FEATURE:
 149 <223> OTHER INFORMATION: Artificial Sequence
 152 <220> FEATURE:
 153 <221> NAME/KEY: MOD_RES
 154 <222> LOCATION: (1)..(1)
 155 <223> OTHER INFORMATION: Acteoamido methyl group
 157 <220> FEATURE:
 158 <221> NAME/KEY: MOD_RES
 159 <222> LOCATION: (1)..(1)
 160 <223> OTHER INFORMATION: ACETYLATION
 162 <220> FEATURE:
 163 <221> NAME/KEY: MOD_RES
 164 <222> LOCATION: (10)..(10)
 165 <223> OTHER INFORMATION: AMIDATION
 167 <220> FEATURE:
 168 <221> NAME/KEY: MOD_RES
 169 <222> LOCATION: (10)..(10)
 170 <223> OTHER INFORMATION: Acteoamido methyl group
 172 <400> SEQUENCE: 7

174 Cys Val Ile Gly Tyr Ser Gly Asp Arg Cys
 175 1 5 10

178 <210> SEQ ID NO: 8
 179 <211> LENGTH: 10
 180 <212> TYPE: PRT
 181 <213> ORGANISM: Artificial Sequence
 183 <220> FEATURE:
 184 <223> OTHER INFORMATION: Artificial Sequence
 187 <220> FEATURE:
 188 <221> NAME/KEY: MISC_FEATURE
 189 <222> LOCATION: (5)..(5)
 190 <223> OTHER INFORMATION: Tic-OH (tetrahydroisoquinoline) at position 5
 192 <400> SEQUENCE: 8

W--> 194 Cys Val Ile Gly Xaa Ser Gly Asp Arg Cys
 195 1 5 10

198 <210> SEQ ID NO: 9
 199 <211> LENGTH: 10
 200 <212> TYPE: PRT
 201 <213> ORGANISM: Artificial Sequence
 203 <220> FEATURE:
 204 <223> OTHER INFORMATION: Artificial Sequence
 207 <220> FEATURE:
 208 <221> NAME/KEY: MISC_FEATURE
 209 <222> LOCATION: (9)..(9)
 210 <223> OTHER INFORMATION: Citrulline at position 9
 212 <400> SEQUENCE: 9

*Xaa can only
 represent a
 single amino
 acid,
 nothing else*

use one i

RAW SEQUENCE LISTING

DATE: 05/06/2003

PATENT APPLICATION: US/09/673,785C

TIME: 10:23:36

Input Set : A:\8830-170.ST25.txt

Output Set: N:\CRF4\05062003\I673785C.raw

W--> 214 Cys Val Ile Gly Tyr Ser Gly Asp Xaa Cys

215 1 5 10

218 <210> SEQ ID NO: 10

219 <211> LENGTH: 9

220 <212> TYPE: PRT

221 <213> ORGANISM: Artificial Sequence

223 <220> FEATURE:

224 <223> OTHER INFORMATION: Artificial Sequence

227 <220> FEATURE:

228 <221> NAME/KEY: MISC_FEATURE

229 <222> LOCATION: (5)..(5)

230 <223> OTHER INFORMATION: 2',6'-dimethyl-beta-methyl-tyrosine at position 5 of linear
231 sequence of amino acids 925-933 of the mature murine b1 chain

233 <400> SEQUENCE: 10

W--> 235 Cys Asp Pro Gly Xaa Ile Gly Ser Arg

236 1 5

239 <210> SEQ ID NO: 11

240 <211> LENGTH: 9

241 <212> TYPE: PRT

242 <213> ORGANISM: Artificial Sequence

244 <220> FEATURE:

245 <223> OTHER INFORMATION: Artificial Sequence

248 <220> FEATURE:

249 <221> NAME/KEY: MISC_FEATURE

250 <222> LOCATION: (5)..(5)

251 <223> OTHER INFORMATION: 2-O-methyl-tyrosine at position 5 of linear sequence of
amino

252 acids 925-933 of the mature murine b1 chain

254 <400> SEQUENCE: 11

W--> 256 Cys Asp Pro Gly Xaa Ile Gly Ser Arg

257 1 5

260 <210> SEQ ID NO: 12

261 <211> LENGTH: 9

262 <212> TYPE: PRT

263 <213> ORGANISM: Artificial Sequence

265 <220> FEATURE:

266 <223> OTHER INFORMATION: Artificial Sequence

269 <220> FEATURE:

270 <221> NAME/KEY: MISC_FEATURE

271 <222> LOCATION: (5)..(5)

272 <223> OTHER INFORMATION: 2-O-ethyl-tyrosine at position 5 of linear sequence of amino
273 acids 925-933 of the mature murine b1 chain

275 <400> SEQUENCE: 12

W--> 277 Cys Asp Pro Gly Xaa Ile Gly Ser Arg

278 1 5

281 <210> SEQ ID NO: 13

282 <211> LENGTH: 10

283 <212> TYPE: PRT

284 <213> ORGANISM: Artificial Sequence

286 <220> FEATURE:

RAW SEQUENCE LISTING

DATE: 05/06/2003

PATENT APPLICATION: US/09/673,785C

TIME: 10:23:36

Input Set : A:\8830-170.ST25.txt

Output Set: N:\CRF4\05062003\I673785C.raw

287 <223> OTHER INFORMATION: Artificial Sequence

290 <220> FEATURE:

291 <221> NAME/KEY: MISC_FEATURE

292 <222> LOCATION: (5)..(5)

293 <223> OTHER INFORMATION: Tic-OH substituted at position 5 of sequence based on mEGF 32-42

295 <220> FEATURE:

296 <221> NAME/KEY: MISC_FEATURE

297 <222> LOCATION: (9)..(9)

298 <223> OTHER INFORMATION: Citrulline at position 9 of sequence based on mEGF 32-42

300 <400> SEQUENCE: 13

W--> 302 Cys Val Ile Gly Xaa Ser Gly Asp Xaa Cys

303 1 5 10

306 <210> SEQ ID NO: 14

307 <211> LENGTH: 10

308 <212> TYPE: PRT

309 <213> ORGANISM: Artificial Sequence

311 <220> FEATURE:

312 <223> OTHER INFORMATION: Artificial Sequence

315 <220> FEATURE:

316 <221> NAME/KEY: DISULFID

317 <222> LOCATION: (1)..(10)

318 <223> OTHER INFORMATION: Disulphide bond between N and C terminal cysteines of sequence

319 based on mEGF 33-42

321 <400> SEQUENCE: 14

323 Cys Val Ile Gly Tyr Ser Gly Asp Arg Cys

324 1 5 10

327 <210> SEQ ID NO: 15

328 <211> LENGTH: 20

329 <212> TYPE: PRT

330 <213> ORGANISM: Artificial Sequence

332 <220> FEATURE:

333 <223> OTHER INFORMATION: Artificial Sequence corresponding to COOH terminal end of the

334 human laminin receptor

336 <400> SEQUENCE: 15

338 Pro Thr Glu Asp Trp Ser Ala Gln Pro Ala Thr Glu Asp Trp Ser Ala

339 1 5 10 15

342 Ala Pro Thr Ala

343 20

346 <210> SEQ ID NO: 16

347 <211> LENGTH: 10

348 <212> TYPE: PRT

349 <213> ORGANISM: Artificial Sequence

351 <220> FEATURE:

352 <223> OTHER INFORMATION: Artificial Sequence - peptide substitution I

355 <220> FEATURE:

356 <221> NAME/KEY: MOD_RES

357 <222> LOCATION: (1)..(1)

358 <223> OTHER INFORMATION: ACETYLTATION

360 <220> FEATURE:

Xaa can only represent a single amino acid

Please correct this type of error in subsequent sequences

Explain source

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/673,785C

DATE: 05/06/2003
TIME: 10:23:37

Input Set : A:\8830-170.ST25.txt
Output Set: N:\CRF4\05062003\I673785C.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; Xaa Pos. 5
Seq#:4; Xaa Pos. 9
Seq#:8; Xaa Pos. 5
Seq#:9; Xaa Pos. 9
Seq#:10; Xaa Pos. 5
Seq#:11; Xaa Pos. 8
Seq#:12; Xaa Pos. 5
Seq#:13; Xaa Pos. 5,9
Seq#:19; Xaa Pos. 9
Seq#:20; Xaa Pos. 5
Seq#:27; Xaa Pos. 3,5
Seq#:29; Xaa Pos. 4,7
Seq#:30; Xaa Pos. 4,7
Seq#:31; Xaa Pos. 5

VERIFICATION SUMMARY

DATE: 05/06/2003

PATENT APPLICATION: US/09/673,785C

TIME: 10:23:37

Input Set : A:\8830-170.ST25.txt

Output Set: N:\CRF4\05062003\I673785C.raw

L:15 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:79 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:99 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:194 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:214 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:235 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:277 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
L:302 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:487 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
L:527 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
L:761 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
L:802 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0
L:829 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
L:850 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0